

## DEVELOPMENT OF MERGERS AND ACQUISITIONS IN THE CONDITIONS OF THE CZECH ECONOMY 2001–2010

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**Received: July 21, 2011**

### Abstract

SEDLÁČEK, J., KRÍŽOVÁ, Z., HÝBLOVÁ, E.: *Development of mergers and acquisitions in the conditions of the Czech economy 2001–2010*. Acta univ. agric. et silvic. Mendel. Brun., 2011, LIX, No. 7, pp. 337–346

This paper presents the first results of a research project which has the aims to identify the problems appearing during the preparation of mergers in compliance with valid Czech regulations and to analyze economic causes and consequences of mergers. At the first stage it was necessary to compile a basic dataset in a structure needed for a statistical analysis. The aim of the analysis presented in this paper is to ascertain, both theoretically and empirically, how the external environment affected the development of mergers of trading companies in the conditions of the Czech economy. The covered period is the past ten years, i.e. 2001–2010, when the development of the global economy was affected by the bank crisis in the USA and the economic recession.

The analysis of the development of mergers and acquisitions focuses on three groups of factors affecting activities in the field of company combinations. These are mergers and acquisitions which are subject to approval by regulatory bodies, the effect of new regulations of financing (financial factors) and the effect of the macroeconomic situation in the form of GDP indicator and PX index. Macroeconomic indicators are related to mergers whose development has not been published or explored within scientific research. The results of the analysis allowed us to describe the dependence of activities in the field of company mergers which took place in the Czech Republic in the past decade on the selected factors of the external environment.

company transformations, types of mergers, merger development, affecting factors, macroeconomic environment, measurement methods

Company transformations are used today as strategic management instruments to stabilize the financial position and enhance financial performance. They are carried out either in the form of an internal (organizational) company growth, such as reinvestments of incomes, building of new plants, implementation of advanced technologies, etc., or they are of an external character – an enterprise joins another or is divided into more companies. The reason for this is mainly the assumption (Cassiman, Colombo, 2006) that company transformations have an improvement potential in comparison with the current situation and that the resulting form of the company will be stronger, more efficient and will employ its

advantages in available markets. When enterprises are combined, a concentration of capital occurs accompanied by the creation of a stronger economic group, the ownership structure changes, new organization systems are created and developed as well as various projects in personnel policy, a global company culture and philosophy is born.

The study into the historical development of company combinations, specifically mergers and acquisitions (M&A), has proven that activities in the M&A market did not happen evenly but they fluctuated in dependence on the level of the economic environment, the development of financial markets and mainly the ideas of bidders and target businesses about the price of a takeover.

Some authors in this respect use the term merger and acquisition waves – these waves come at a certain level of development of an economy. E.g. Levy and Sarnat (1994) talk about 3 waves, Bobenic-Hintos (2009) mention 4 waves, Bruner (2004) divides the fourth wave into two: a) and b), Martynova and Rennebook (2008) differentiate 5 waves, Lipton (2006) identifies 6 waves of mergers and acquisitions. There are also differences in the temporal distribution of these waves as presented by the above mentioned authors. The first references to mergers and acquisitions were observed at the end of the 19<sup>th</sup> century, when in the USA there was a need for larger investments in business and an effort to stabilize the position of some enterprises in the market. Typical features of individual waves of M&A and their organization in time are presented in Tab. I.

In each wave of mergers and acquisitions we can find sensible motives for company combinations which correspond to the degree of the development of society. As regards economic motives, investors or the management believe that two or more businesses together will be of more value than separately. Implementation of these combinations is supported by generally valid economic laws, such as economies of scale in relation to horizontal mergers, economies of vertical integration, non-used tax shields, removal of low production efficiency, diversification, lower financial costs, etc. We may think, together with other authors (Bruner, 2004) that at the top of the economic cycle businesses have free cash funds and acquisitions and mergers represent good investment opportunities for them. A transformation can bring a higher economic potential as regards competitiveness than repeated investments in company internal changes, construction of new plants, implementation of new technologies, etc. The growth of world economy promotes efforts towards concentration of capital and application of acquisitions and mergers in a global scale. Looking at the opposite stage of the economic cycle, in the period of economic problems and low capital prices in financial markets activities in the area of mergers and acquisitions should increase, not slow down. The economic motive is probably somehow related to growing markets, when purchase is more intensive. Generally however, no clear and strong correlation between the progress of the economic cycles and activities in

the area of mergers and acquisitions has been found (Brealey, Myers, 2000).

The subject of our interest is company transformations which involve their bonding and control takeover. These are acquisitions and mergers, which according to Allen and Overy (2011) represent over 49% (when measured by the number of deals) or 58% (when measured by the volume of deals) of all company transformations implemented globally in 2007–2010. The second important category of transformations is divestments (Gole, Hilger, 2008), when companies sell off their controlling interest (> 30%) in one or more of their fields of activity in one or more of their businesses. The development of numbers and volumes of these transactions is presented in Tab. II.

The US National Bureau of Economic Research (NBER, 2010) announced that the last economic recession and financial crisis had ended in June 2009, when macroeconomic indicators dropped to the minimum. Since then, there has been an economic growth, measured by GDP and GDI indicators. The International Monetary Fund (IMF) estimates that large US and European banks lost over a trillion USD of toxic assets and bad loans from January 2007 till September 2009. Due to their losses, banks in the USA were reduced by 60% whereas banks in the eurozone by 40% only. The beginning of the global financial crisis was marked by the Bank of America as February 2007, when the credit risk was overvalued and unprecedented capital losses caused by a sharp drop in the value of structured credit products based on mortgage bonds launched the financial crisis in the USA, which brought a fall in company profits. During that year, many mortgage companies and US investment banks closed their business. The panic in the financial markets forced investor to invest in commodities in order to maintain their value. Financial speculations in commodity futures after the fall of financial derivatives markets contributed to the rise in global prices of food and oil. In comparison with the previous bank crisis 2001 – 2003, which took place inside the USA, the last crisis was exported in the form of economic recession into the other countries of the world (Bank of America, 2007).

Analyses of causes of financial crises indicate creations of price bubbles as a consequence of excessive risk taken by investors and provision

I: *Merger waves based on the merger and acquisition activities in the business world*

Wave	Period	Facet
1.	1895–1904	Horizontal mergers
2.	1925–1928	Vertical mergers
3.	1965–1970	Diversified conglomerate mergers
4.	1981–1987	Congeneric mergers; Hostile takeovers; Corporate Raiding
5.	1992–2000	Cross-border mergers
6.	2003–2008	Shareholder Activism, Private Equity, Leveraged Buy Out (LBO)

Source: Bruner, 2004; Lipton, 2006

II: *Global M&A trends (volume of deals – USDm)*

	Merger and acquisitions		Subsidiary disposals		Other business transformations	
	Value of deals	Volume of deals	Value of deals	Volume of deals	Value of deals	Volume of deals
Q1 2007	499	420 375	279	170 008	37	164 699
Q2 2007	605	688 297	338	316 569	57	213 713
Q3 2007	511	550 931	286	176 995	24	66 401
Q4 2007	537	400 598	336	209 951	32	60 879
Q1 2008	442	281 112	247	126 903	18	135 801
Q2 2008	446	408 064	267	153 104	23	68 284
Q3 2008	373	475 863	249	163 170	19	31 379
Q4 2008	220	280 456	159	142 569	5	4 634
Q1 2009	179	316 686	132	74 229	5	3 469
Q2 2009	197	173 682	178	183 071	5	10 206
Q3 2009	235	175 012	219	111 938	16	7 588
Q4 2009	320	371 084	232	128 572	19	33 451
Q1 2010	291	201 523	179	207 842	10	11 798
Q2 2010	361	236 290	241	148 695	19	19 980
Q3 2010	355	277 251	233	170 785	17	34 912
Q4 2010	420	436 633	284	206 254	22	37 062
Total	5 991	5 693 857	3 859	2 690 655	328	904 256

Source: Allen and Overy, 2011

of unsecured credits for these trades. Ineffective liquidity and failure of debtors leads to a drop in asset prices, fall of market and transition of problems from the financial sector to real economy (Challe, Ragot, 2011). Some partial studies confirm the links between the waves of mergers and acquisitions and the behaviour of financial markets (Hodes-Kropf, Viswanathan, 2004) but the effect of a financial crisis on transformation activities of companies has not yet been clearly proved.

This paper contains an analysis of the impact of the economic environment on activities in the M&A market in the conditions of the Czech Republic in the past decade. If the growth in business efficiency positively affects macroeconomic indicators and the decrease in economic growth pace reflects negatively, logically, there should be a link to the level of activities in the field of company combinations. The decreasing entrepreneurial trust, decreases in expenses on capital investments, lower demand for imports, slump of financial markets and heavy price discounting will probably be reflected in a reduction of activities in the M&A market (Sedláček, 2007); on the other hand, undervalued financial markets represent an opportunity for interesting investments and an expansion of entrepreneurial activities.

## MATERIALS AND METHODS

Studies dealing with analyses of the development in the M&A market are predominantly based on global database systems, such as Mergerstat or Thomson Reuters, which largely contain data on combinations of enterprises traded in public

markets. In relation to the recent development of private equity funds, information systems focusing on this area have been created. To measure activities in the M&A market these studies use time series reflecting the number of company combinations implemented in the investigated period and the value of the total equity entering a combination. Markets usually do not distinguish between acquisitions and mergers, which are then considered synonymic. An agreement on a combination of two or more enterprises into one, which thus gains more advantages than if the companies did business separately, is usually referred to as a merger. According to West's Encyclopedia of American Law (2011) is a merger or acquisition a combination of two companies where one corporation is completely absorbed by another corporation. The less important company loses its identity and becomes part of the more important corporation, which retains its identity. A merger extinguishes the merged corporation, and the surviving corporation assumes all the rights, privileges, and liabilities of the merged corporation. A merger is not the same as a consolidation, in which two corporations lose their separate identities and unite to form a completely new corporation.

The Czech trade law defines a merger as a combination in which one or more companies cease to exist without liquidation and their equity, including rights and duties following from labour-law relations, are transferred to another existing or a newly established successor company. It means this is a legal combination which requires an agreement of all participating companies. On the other hand, an acquisition is a transaction in which

one company (the bidder) gains a decisive share of the basic equity of another (target) business. The acquisition can have a character of a capital investment (capital acquisition) or a property acquisition, in which the entire company or its part is purchased. By this a group of companies connected by their capital arises and the legal position of individual companies does not change. Unless this is a hostile takeover, also a legal takeover can take place in case of property acquisition or capital acquisition by one owner. The differences between mergers and acquisition will mainly stand out in accounting procedures (Bohušová, 2011; Skálová, 2010). Similarly, the European law (Directive 2005/56/EC of the European Parliament and of the Council of 26 October 2005 on cross-border mergers of limited liability companies) defines a merger as a process in which one or more companies, on being dissolved without liquidation, transfer all their assets and liabilities to another existing or a new company, in exchange for the issue of securities or shares representing the capital of the successor company and, if applicable, a cash payment not exceeding 10% of the nominal value of those securities or shares.

To be able to assess the impact of external factors on the development of mergers of trading companies in the conditions of the Czech economy, it is necessary for us to create our own database which would include all mergers implemented in the monitored period (home and cross-border). The basic dataset included all company transformations from which one continuing company (successor) remained and one or more of the participating entities ceased to exist (company acquired). Four types of mergers are distinguished:

- a) merger type 1: a merger during which one or more companies are absorbed by an existing (successor) company which takes over their equity,
- b) merger type 2: a merger during which two or more companies cease to exist without liquidation and their equity is transferred to a newly established successor company,
- c) merger type 3: division of a company by combination, during which one of the divided companies combines with another existing company,
- d) merger type 4: division of a company by demerger, during which a demerged company combines with another existing company.

The initial source of data was the Trade Register (2011), from which the identification data of merging companies were excerpted as well as temporal, legal and economic information.

To evaluate an activity in the field of M&A, the following methods have been used:

- a) a graphical analysis which compares the number of intended company transformations in a territory. These are mergers and acquisitions submitted to be approved by the regulatory body

of the specific country (in the Czech Republic this is the Office for the Protection of Competition). The duty to announce an intended combination arises from a financial limit, which is established as 1.5 billion CZK net turnover of all competitors entering the combination achieved in the last accounting period in the Czech market and at least two of the combining competitors achieved each a net turnover more than 250 million CZK in the last accounting period. The development trend is compared with the development of announced M&A submitted to be approved by the EU regulatory body.

The progress of dependence between the two trends is measured by the method of correlation analysis using Pearson correlation coefficient.

$$r_{xy} = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2 \sum_{i=1}^n (Y_i - \bar{Y})^2}}, \quad (1)$$

where:

$r_{xy}$  ..... selected correlation coefficient (Pearson)

$X, Y$  ..... random quantities

$i$  ..... number of random quantities  $i \in \langle 1, n \rangle$ .

- b) a regression analysis which compares the development of M&A financed by private equity. As a model, the development of transformations conducted on a global scale was chosen. Two temporal series are analysed: the first one created based on the number of implemented combinations in individual years, the second one based on the value of combining businesses. To monitor the development trend we calculated relative proportions ( $p$ ) of the explored quantities in individual years of the selected time interval using equations:

$$p_{xi} = \frac{100X_i}{\frac{1}{n} \sum_{i=1}^n X_i} \quad (2)$$

$$p_{yi} = \frac{100Y_i}{\frac{1}{n} \sum_{i=1}^n Y_i}. \quad (3)$$

Based on the empirical analysis, a specific regression function suitable for the description of the dependence of both quantities is chosen. The highest quality of agreement with the data has been found for power function

$$y = b_0 x^{b_1}, \quad (4)$$

where:

$b_{0,1}$  ..... parameters of a theoretical regression function.

- c) a correlation analysis which measures the correlation between the macroeconomic environment and the number of implemented mergers. Three time series are correlated. These were created using quarterly values of the

GDP, PX indices and the number of mergers implemented in the monitored period. The development trend is again described by relative proportions (p) of the explored quantities in individual years of the selected time interval.

To describe the development trend of the temporal series we will use a linear regression function.

$$y = b_0 + b_1 x. \quad (5)$$

Regression coefficient  $b_1$  is tested at a level of significance  $\alpha = 0.05$  by hypothesis

$$H_0 : b_0 = 0; \text{ against alternative } H_1 : b_1 \neq 0;$$

Testing criterion  $t$  is as follows:

$$t = \frac{|b_1| \sqrt{\sum_{i=1}^n x_i^2 - n\bar{x}^2}}{S}, \quad (6)$$

where the residual standard deviation is calculated using equation

$$s = \left[ \frac{\left( \sum_{i=1}^n y_i^2 - b_0 \sum_{i=1}^n y_i - b_1 \sum_{i=1}^n x_i y_i \right)}{(n-2)} \right]^{\frac{1}{2}}. \quad (7)$$

To measure the dependence between the explored trends we will again use the Pearson correlation coefficient.

The database of mergers implemented in the Czech territory created by the team of the Faculty of Economics and Administration, Masaryk University in Brno, enables scientists to analyse and evaluate mergers as defined by Czech regulations purified from acquisitions and other company transformations. In contrast to

acquisitions, a merger is conducted with agreement of all participating enterprises and if there is a strong majority or one owner the takeover will take the form of a combination of interests (pooling). In the opposite case, the companies will probably agree on the method of a purchase with an exchange of securities (Wirtz, 2003).

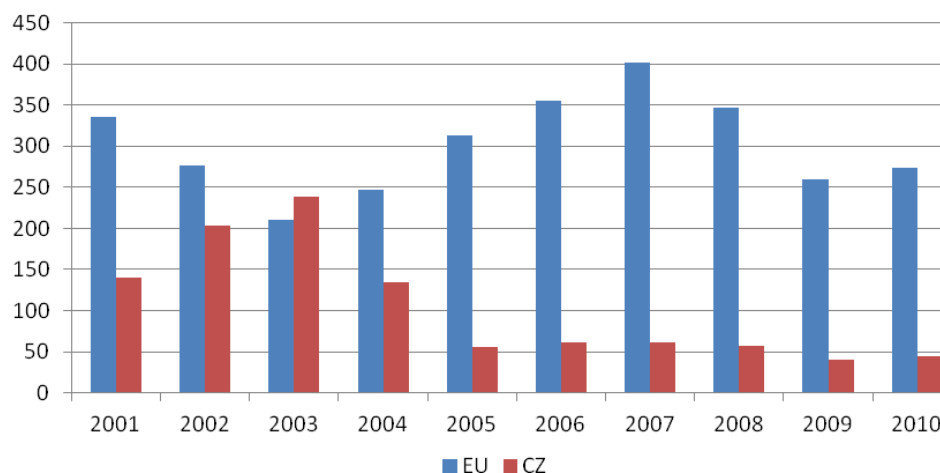
The methodology for database creation requires the basic statistical dataset to be completed with the economic data which would enable us to evaluate the economic efficiency of the implemented mergers. Due to the low number of entities traded in the Czech public market, it will not be possible to measure the effect of mergers on the value of acquirer by acquirer cumulative abnormal returns (CARs) and to compare the results with the results of earlier published studies on the effect of acquisitions on the value of a company (see for example: Bayazitova, Kahl, Valkanov, 2010; Rosen, 2006; Kling, Weitzel, 2009; Fritsch, Gleisner, Hholzhäuser, 2007; Teplý, Stárová, Čermohorský, 2010. The evaluation criterion will be individual results of participating companies measured by a financial analysis in the form of profitability and liquidity achieved before and after a merger.

## RESULTS

The source of data for the graphical analysis of the M&A development trend was the EU and CR regulatory bodies, which publish the data on accepted or resolved transaction applications. The development trend of the number of company combinations submitted for approval in the monitored period is presented in Fig. 1. The dependence between both trends was measured by correlation coefficient whose value is

$$r_{xy} = -0.533472544.$$

This is an indirect dependence of medium size, which confirms the volatility of both trends



1: Number of notified cases M&A in European Union and Czech Republic

Source: CZ Office for the Protection of Competition, European Commission – Competition (2011)



although in the case of Czech activities there was a substantial decrease in announced M&A since 2003 and the decrease stabilized at the minimum after 2005.

The sixth wave of M&A was caused by the activity of capital owners, using debts for financing of mergers and acquisitions (LBO) and the increase in investments by means of private equity funds. The development of acquisitions concluded by financial investors, according to statistics of the Czech Private Equity and Venture Capital Association (CVCA) and Thomson Reuters, was expressed in the form of relative proportions (p), which were put on graph. Fig. 2 shows the development in the number of transactions and Fig. 3 shows the development of the value of investments from private equity funds.

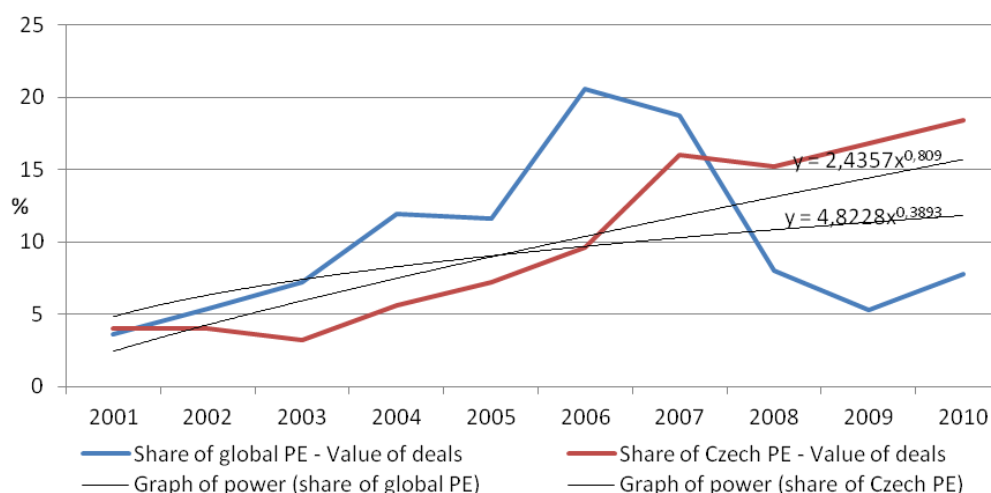
The development trend measured by the number of combinations financed by private equity is described by regression equation (8) calculated for globally conducted combinations and equation (9)

calculated for investments in the CR. To evaluate the agreement of the power regression model with the data, the standard coefficient of multiple determination  $R^2$  was calculated; it manifests a higher agreement than that of data in the linear model.

$$y = 4.8228x^{0.3893}; R^2 = 0.2604. \quad (8)$$

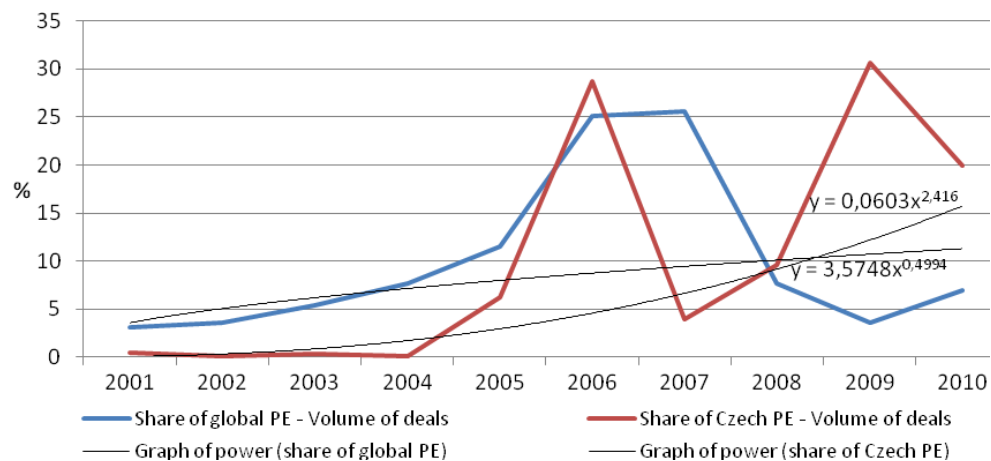
$$y = 2.4357x^{0.309}; R^2 = 0.7724. \quad (9)$$

The growing trend of Czech combinations financed by private equity is confirmed by curves in Fig. 3, which reflect the volumes of investments in individual years. The regression functions describe the gradual growth of transaction financing, which as in the case of the number of implemented combinations develops faster in Czech M&A than the global ones. The calculations of the parameters of regression functions are presented in equations



2: Development of M&A private equity-funded (value of deals)

Source: Thomson Reuters (2011) and CVCA (2010)



3: Development of M&A private equity-funded (volume of deals)

Source: Thomson Reuters (2011) and CVCA (2010)

(10) for globally conducted combinations and (11) for investments in the CR. The reliability of the model is again expressed by determination coefficient  $R^2$ .

$$y = 3.5748x^{0.4994}; R^2 = 0.2358, \quad (10)$$

$$y = 0.0603x^{2.416}; R^2 = 0.5689. \quad (11)$$

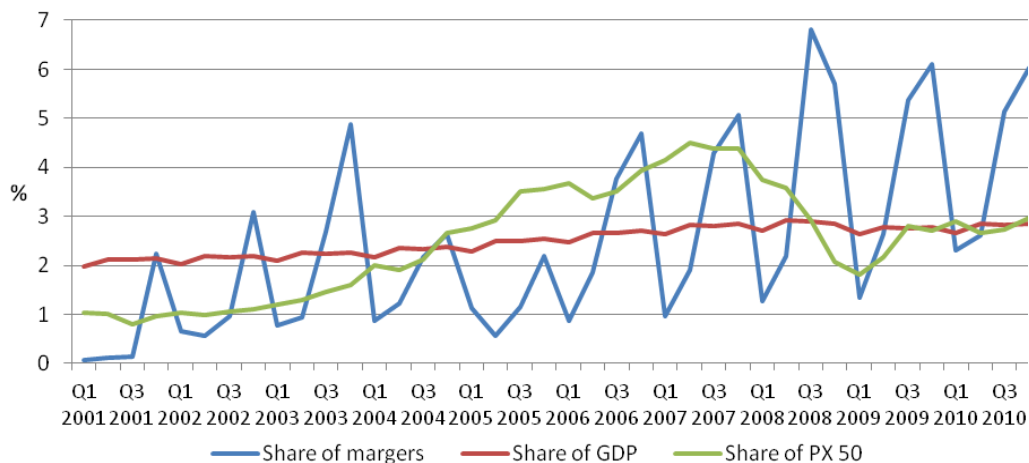
The calculated correlation coefficient between the development of GDP and the number of mergers conducted in the monitored period indicated high dependence  $r_{xy} = 0.652338184$ . Statistical significance test of parameter  $b_1$  in the model (6) shows that the calculated testing criterion  $t = 5.30557 > t_{0.05}(38) = 2.006$ ; therefore, we reject zero hypothesis  $H_0$  in favour of the alternative hypothesis  $H_1$ . The statistical significance of the calculated correlation coefficient has been confirmed. The data (time series) satisfy the conditions for application of a simple model.

The relationship between the temporal series of percentage shares of the number of conducted mergers and the quarterly indices of the Czech capital market PX seems to be of medium size with respect to the value of Pearson correlation coefficient  $r_{xy} = 0.338452149$ . The value of the testing criterion  $t = 2.21721$  is again higher than the critical value of t-division. We reject hypothesis  $H_0$  because the correlation coefficient is statistically significant at a level of significance  $\alpha = 0.05$ . The entire progress of the analysed quantities is shown in Fig. 4.

amount of causes bringing or inhibiting the waves. We can generally refer to them as factors which are characteristic of an economic environment and they can be divided into six areas:

- Regulatory factors (e.g., rule of law and regulatory quality)
- Economic factors (e.g., GDP growth and economic freedom)
- Financial factors (e.g., stock market capitalisation and access to financing)
- Political factors (e.g., political stability and corruption of officials)
- Technological factors (e.g., R&D expenditure and innovation)
- Socio-cultural factors (e.g., people, talent and labour skills).

A favourable development of the listed factors in connection with internal motives arouses investors' interest in devouring or controlling a target business or target business's interest in gaining capital. The period we analysed, before which horizontal, vertical, conglomerate, congeneric and cross-border combinations had taken place, is characterized by the inclusion of private equity funds, shift to developing markets and consolidation of regulatory rules for M&A. Therefore, we observed how regulated acquisitions and mergers develop in the conditions of the CR, the development of private equity being used for M&A financing, and finally, how economic and financial factors affect activities in the field of company mergers.



4: Development of Czech Mergers (value of deals), GDP and PX

Source: authors' database, Czech Statistical Office (2011), CNB-Prague Stock Exchange (2011)

## DISCUSSION

Historical statistical data confirm the interpretation of the development of mergers and acquisition in waves. After the last sixth wave, which came after the bank crisis in the USA, a seventh could follow after the financial crisis and economic recession. We could find a countless

As follows from the M&A development analysis, there is a negative correlation between the number of announced combinations in the EU and the CR which can be evaluated as medium. The progress of the curve of announced European combinations manifests two falling stages which can be compared to the economic recession during the bank crisis

in the USA and the global financial crisis with a one-year delay. The drop of the Czech regulated combinations culminated in 2005 and 2009 without any obvious link to the economic cycle.

The regression analysis has confirmed the faster growing development trend of the Czech combinations financed by private equity in comparison to globally implemented M&A. The growth character of acquisition activities financed from private funds has been observed both in the number of monitored acquisition activities (see Fig. 2) and the value of implemented investments (see Fig. 3). The results are in agreement with recently published studies which assume a larger usage of this new approach to financing M&A in developing economies mainly.

The effect of the macroeconomic environment has been confirmed by the correlation analysis between quarterly changes in seasonally adjusted GDP and the number of mergers only (purified from acquisitions and other transformations) implemented in the Czech Republic in 2001–2010. According to our results there is a strong correlation between these two quantities; it means an economic fall measured by quarterly GDP is not favourable for activities in the field of mergers. Financial factors also affect the development of mergers, although with a medium correlation. This result has been proved for the correlation of mergers only with the value of quarterly PX indices. It expresses the fact that investors behave rationally even when prices in the market deviate.

## CONCLUSIONS

Our research has monitored activities of Czech enterprises in the field of mergers and acquisitions during the past decade. We are presenting theoretical arguments for the development of activities in the field of company transformations as well as empirical analyses. For the actual exploration a database of companies which implemented a merger in the monitored period has been created. The conducted analyses allowed us to answer the questions regarding the relationships between company transformations and regulations, new methods of financing and the development of the economic and financial environment in the form of GDP indicator and PX index.

In agreement with conclusions of studies conducted by global auditing companies and legal and advisory organizations, a faster growth of M&A financed by private equity and the reduction of activities subject to regulation have been confirmed for the CR. The development of Czech mergers responds positively to the macroeconomic environment and it has been confirmed that a stable economic environment allows for an easier estimation of the behaviour of a potential merger target or an investor. In contrast to the information published in analyses, strong correlation between the price development in the Czech capital market and activities in the field of mergers has not been confirmed.

To be able to judge the causes and effects of mergers in the Czech economy more deeply, it is necessary that the created database includes economic data of participating enterprises. This completion of data is in progress.

## SUMMARY

The subject of the analysis is company transformations which lead to their combinations or takeovers. The growth of the global economy supports efforts at capital concentration and implementation of acquisitions and mergers on an international scale. A transformation can lead to a higher economic potential from the perspective of competitiveness than reinvestment of profits into internal changes, building new plants, implementation of advanced technologies, etc. An economic motive is probably linked to growing markets when the intensity of purchases grows. However, generally no clear and strong correlation between the progress of the economic cycle and activities in the field of mergers and acquisitions has been found. The development of activities in the M&A markets did not proceed evenly but in waves. Although we can interpret the causes of the waves, their timing remains secret. Therefore, one of the goals of our research was exploration into the effect of the external environment on M&A activities in the CR in the past decade. The comparative analysis included the effect of regulation on the number of announced mergers and acquisition, the effect of fund financing on the number and volume of implemented M&A and the effect of economic and financial factors on implemented mergers. To express the last mentioned effect it was necessary to create a database providing an overview of the implemented mergers only in the Czech territory. The database contains identification data of companies which participated in a merger, further, time, legal and economic information necessary for the evaluation of the economic situation of a successor company. The analysis of the development trend of M&A subject to regulation has confirmed the existence of a negative correlation of a medium size between the number of announced combinations in the EU and the CR. While the curve of announced European combinations corresponds to the economic development of the USA with a one-year delay, the fall in Czech regulated combinations culminated in 2005 and 2009 without any obvious link to the economic cycle.



In agreement with recently published studies which assume that future development of mergers and acquisitions will be possible thanks to the use of private equity funds in developing economies mainly, a faster growing development trend of Czech combinations has been confirmed in comparison to globally implemented M&A.

Testing the impact of the macroeconomic environment on M&A has confirmed the existence of a strong correlation between quarterly changes in seasonally adjusted GDP and the number of mergers only implemented in the CR in 2001–2010. Financial factors measured by quarterly PX indices also influence the development of mergers although with only a medium correlation.

#### Acknowledgements

The paper contains first results of project of Grant Agency CR No. 403/11/0447 *The Analysis of Taxation and Accounting Procedures during Mergers*. The project solution, which will be conducted in 2011–2013, was entrusted to the team of the Department of Finance, Faculty of Economics and Administration, Masaryk University in Brno.

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